

IN THE CLAIMS

Please amend claims 1, 3, 6, 8, 11 and 13 as follows:

1. (CURRENTLY AMENDED) A computer-implemented system of developing multi-tier business applications, comprising:

an Integrated Development Environment (IDE), executed by a computer, for creating and maintaining a multi-tier business application on a multiple tier computer network, wherein the IDE includes a Topological Multi-Tier Business Application Composer that is used by a developer to graphically create and maintain the multi-tier business application, a Meta-model that captures and persistently stores information entered via the Composer, and an Interactive Agent that monitors the Meta-model for an occurrence of ~~one or more specific~~ an event ~~that comprises a possible non-optimization in a portion of the multi-tier business application based upon an heuristic analysis of information gathered by the Composer and stored within the Meta-model,~~ whereupon the Interactive Agent triggers a display of a graphical element in the Composer to interact with the developer, and the graphical element includes context information comprising a list of suggested and recommended actions.

2. (ORIGINAL) The system of claim 1, wherein the Interactive Agent includes a Novice mode, and the Interactive Agent is triggered in the Novice Mode when an event occurs that is selected from a group comprising:

- opening a new window;
- adding a new type of graphical element to a window;
- repetitiously adding a same type of graphical element to a window;
- transitioning from one window to another window;
- defining more than a predetermined number of tiers;
- defining less than a predetermined number of tiers;
- defining more than a predetermined number of workstations;
- defining less than a predetermined number of workstations;
- defining more than a predetermined number of applications;
- defining less than a predetermined number of applications;
- defining more than a predetermined number of data paths;

defining less than a predetermined number of data paths;
failure to use a specified feature in a window; and
an apparent non-awareness of a specified feature in a window.

3. (CURRENTLY AMENDED) The system of claim 1, wherein the Interactive Agent includes an Advanced mode, and the Interactive Agent is triggered in the Advanced Mode when [[an]] the event occurs that comprises [[a]] the possible non-optimization in [[a]] the portion of the multi-tier business application based upon [[an]] the heuristic analysis of the information gathered by the Composer and stored within the Meta-model.

4. (PREVIOUSLY PRESENTED) The system of claim 3, wherein the possible non-optimization is determined by examining attributes of the multi-tier business application stored within the Meta-model.

5. (ORIGINAL) The system of claim 1, wherein the Meta-model is updated and kept in synchronization with any updates made to the multi-tier business application via the Composer window.

6. (CURRENTLY AMENDED) A computer-implemented method for developing multi-tier business applications, comprising:

creating and maintaining a multi-tier business application on a multiple tier computer network using an Integrated Development Environment (IDE) executed by a computer, wherein the IDE includes a Topological Multi-Tier Business Application Composer that is used by a developer to graphically create and maintain the multi-tier business application, a Meta-model that captures and persistently stores information entered via the Composer, and an Interactive Agent that monitors the Meta-model for an occurrence of ~~one or more specific~~ an event [[s]] that comprises a possible non-optimization in a portion of the multi-tier business application based upon an heuristic analysis of information gathered by the Composer and stored within the Meta-model, whereupon the Interactive Agent triggers a display of a graphical element in the Composer to interact with the developer, and the graphical element includes context information comprising a list of suggested and recommended actions.

7. (ORIGINAL) The method of claim 6, wherein the Interactive Agent includes a Novice mode, and the Interactive Agent is triggered in the Novice Mode when an event occurs that is selected from a group comprising:

- opening a new window;
- adding a new type of graphical element to a window;
- repetitiously adding a same type of graphical element to a window;
- transitioning from one window to another window;
- defining more than a predetermined number of tiers;
- defining less than a predetermined number of tiers;
- defining more than a predetermined number of workstations;
- defining less than a predetermined number of workstations;
- defining more than a predetermined number of applications;
- defining less than a predetermined number of applications;
- defining more than a predetermined number of data paths;
- defining less than a predetermined number of data paths;
- failure to use a specified feature in a window; and
- an apparent non-awareness of a specified feature in a window.

8. (CURRENTLY AMENDED) The method of claim 6, wherein the Interactive Agent includes an Advanced mode, and the Interactive Agent is triggered in the Advanced Mode when [[an]] the event occurs that comprises [[a]] the possible non-optimization in [[a]] the portion of the multi-tier business application based upon [[an]] the heuristic analysis of the information gathered by the Composer and stored within the Meta-model.

9. (PREVIOUSLY PRESENTED) The method of claim 8, wherein the possible non-optimization is determined by examining attributes of the multi-tier business application stored within the Meta-model.

10. (ORIGINAL) The method of claim 6, wherein the Meta-model is updated and kept in synchronization with any updates made to the multi-tier business application via the Composer window.

11. (CURRENTLY AMENDED) An article of manufacture embodying logic for developing multi-tier business applications, the logic comprising:

creating and maintaining a multi-tier business application on a multiple tier computer network using an Integrated Development Environment (IDE) executed by a computer, wherein the IDE includes a Topological Multi-Tier Business Application Composer that is used by a developer to graphically create and maintain the multi-tier business application, a Meta-model that captures and persistently stores information entered via the Composer, and an Interactive Agent that monitors the Meta-model for an occurrence of ~~one or more specific~~ an event [s] that comprises a possible non-optimization in a portion of the multi-tier business application based upon an heuristic analysis of information gathered by the Composer and stored within the Meta-model, whereupon the Interactive Agent triggers a display of a graphical element in the Composer to interact with the developer, and the graphical element includes context information comprising a list of suggested and recommended actions.

12. (ORIGINAL) The article of manufacture of claim 11, wherein the Interactive Agent includes a Novice mode, and the Interactive Agent is triggered in the Novice Mode when an event occurs that is selected from a group comprising:

- opening a new window;
- adding a new type of graphical element to a window;
- repetitiously adding a same type of graphical element to a window;
- transitioning from one window to another window;
- defining more than a predetermined number of tiers;
- defining less than a predetermined number of tiers;
- defining more than a predetermined number of workstations;
- defining less than a predetermined number of workstations;
- defining more than a predetermined number of applications;
- defining less than a predetermined number of applications;
- defining more than a predetermined number of data paths;
- defining less than a predetermined number of data paths;
- failure to use a specified feature in a window; and
- an apparent non-awareness of a specified feature in a window.

13. (CURRENTLY AMENDED) The article of manufacture of claim 11, wherein the Interactive Agent includes an Advanced mode, and the Interactive Agent is triggered in the Advanced Mode when ~~[[an]] the~~ event occurs that comprises ~~[[a]] the~~ possible non-optimization in ~~[[a]] the~~ portion of the multi-tier business application based upon ~~[[an]] the~~ heuristic analysis of the information gathered by the Composer and stored within the Meta-model.

14. (PREVIOUSLY PRESENTED) The article of manufacture of claim 13, wherein the possible non-optimization is determined by examining attributes of the multi-tier business application stored within the Meta-model.

15. (ORIGINAL) The article of manufacture of claim 11, wherein the Meta-model is updated and kept in synchronization with any updates made to the multi-tier business application via the Composer window.